

50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Proposed Threatened Status for *Echinocereus reichenbachii* var. *chisoensis***AGENCY:** Fish and Wildlife, Interior.**ACTION:** Proposed rule.

SUMMARY: The Service proposes to determine threatened status for a plant, *Echinocereus reichenbachii* var. *chisoensis* (Chisos Mountain hedgehog cactus). The only known locality for this species is Big Bend National Park, Texas, where an estimated 1,000 individuals occur. Because of its low numbers and limited distribution, this plant is vulnerable to taking and to habitat disruption from road improvements and trail construction. Habitat degradation from former grazing, climatic changes, or other undermined factors may be causing a decline in recruitment. A final determination that this plant is threatened will implement the protection provided by the Endangered Species Act of 1973, as amended. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by September 4, 1987. Public hearing requests must be received by August 20, 1987.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the Service's Regional Office of Endangered Species, 500 Gold Avenue SW., Room 4000, Albuquerque, New Mexico.

FOR FURTHER INFORMATION CONTACT: Sue Rutman, Botanist, Endangered Species Office, Albuquerque, New Mexico (see **ADDRESSES** above) (505/766-3972 or FTS 474-3872).

SUPPLEMENTARY INFORMATION:**Background**

Echinocereus reichenbachii var. *chisoensis* (Chisos Mountain hedgehog cactus) is a Chihuahuan Desert plant endemic to Big Bend National Park, Brewster County, Texas. It was first collected in April 1939, by F. Radley near the Chisos Mountains in Big Bend National Park. Marshall (1940) formally named it *Echinocereus chisoensis* in honor of the type locality. Benson (1969) assigned this taxon to the varietal level, revising the name to *E. reichenbachii* var. *chisosensis*. The varietal name is spelled *chisoensis* in this proposal to conform with the spelling in the original publication.

The plant occurs on alluvial flats near the Chisos Mountains at elevations of 1,950–2,370 feet (595–720 meters). Vegetation is very sparse, with total plant cover in some places estimated at only 20–30 percent (Heil and Anderson 1982). Commonly associated plants are *Larrea tridentata* (creosote bush), *Agave lecheguilla* (lechuguilla), and *Opuntia schottii* (dog cholla). *E. r.* var. *chisoensis* frequently grows on bare soil within spreading clumps of *Opuntia schottii*, and is also found in the shade of other associated plants.

The total number of individuals of *E. r.* var. *chisoensis* has been estimated at 1,000. These plants occur in an area approximately 3.1 by 10.6 miles (5 by 17 kilometers), but do not occupy all potential habitat. *E. r.* var. *chisoensis* has not been found in the bordering States of Chihuahua and Coahuila, Mexico (Heil *et al.* 1985).

This cactus can be identified by the deep green or bluish green stems, 3–6 inches (7.5–15 centimeters) tall, with 12–14 radial and 1–4 central spines per areole. This variety can be distinguished from other varieties of the same species by the length of the central spines and the whiteness of the spine mass. During the flowering season of March to early June, the plants are conspicuous due to

the showy tri-colored flowers and the white wool and slender spines of the floral tube (Benson 1982). Flower petals are red at the base, white at mid-length, and fuchsia at the tips. Fruits are green with a red tinge, are fleshy, and have long white wool in the areoles (Evans 1986). Fruits mature from May to August and contain 200–250 seeds (Heil *et al.* 1985).

The population biology and ecology of this species are poorly understood. Some authorities have proposed that plant recruitment is limited by poor seedling establishment (E. Leuck, Centenary College of Louisiana, pers. comm. 1986; Heil and Anderson 1982). Leuck and Ross (both in Heil and Anderson 1982) have suggested that short grass cover is the preferred site for seedling establishment and that grass cover was probably substantially reduced by overgrazing during the period from World War I through World War II. Other authorities have suggested that long and short term climatic shifts have caused drier conditions, which may be contributing to a population decline (A. Zimmerman, Chihuahuan Desert Research Institute, pers. comm. 1986; D.B. Evans, Big Bend National Park, pers. comm. 1986). Plant recruitment may also be limited by other undetermined factors.

Echinocereus reichenbachii var. *chisoensis*, was among those species covered by a report on endangered, threatened, and extinct plants, which was prepared by the Secretary of the Smithsonian Institution in accordance with section 12 of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*). This report, designated as House Document No. 94–51, was presented to Congress on January 9, 1975. In the **Federal Register** of July 1, 1975 (40 FR 27823–27924), the Service issued a notice of its acceptance of this report as a petition within the context of section 4(c)(2) of the Act (petition acceptance provisions are now contained in section 4(b)(3)(A) of the Act, as amended), and of its intention to review the status of the plant taxa named therein. In the **Federal Register** of June 16, 1976 (41 FR 24523–24572), the Service issued a

proposed rule to determine endangered status for approximately 1,700 vascular plant species. *E. r. var. chisoensis* was included in the Smithsonian report, the notice of July 1, 1975, and the proposal of June 16, 1976. General comments received on the proposal were summarized in the **Federal Register** of April 26, 1978 (43 FR 17909-17916).

The Endangered Species Act Amendments of 1978 required the withdrawal of all proposed rules over 2 years old, though a 1-year grace period was allowed to proposals then already over 2 years old. Accordingly, in the **Federal Register** of December 10, 1979 (44 FR 70796-70797), the Service issued a notice withdrawing that portion of the proposal of June 16, 1976, that had expired, along with four other proposals that had expired. In the **Federal Register** issues of December 15, 1980 (45 FR 82480-82569), and September 27, 1985 (50 FR 39526-39527), the Service published revised notices of review. *E. r. var. chisoensis* was placed in category 1 of those notices, meaning that the Service had substantial information supporting the appropriateness of proposing endangered or threatened status.

The Endangered Species Act Amendments of 1982 required that petitions, such as that comprised by the Smithsonian report, which were still pending as of October 13, 1982, be treated as having been received on that date. Section 4(b)(3) of the Act, as amended, requires that, within 12 months of the receipt of such a petition, a finding be made as to whether the requested action is warranted, not warranted, or warranted but precluded by other activity involving additions to or removals from the Federal Lists of Endangered and Threatened Wildlife and Plants. Therefore, on October 13, 1983, the Service made the finding that determination of endangered status for *E. r. var. chisoensis* was warranted but precluded by other listing activity. This finding was published in the **Federal Register** of January 20, 1984 (49 FR 2485-2488), as corrected in the **Federal Register** of February 16, 1984 (49 FR 5977). In the case of such a finding, the petition is recycled and another finding becomes due within 12 months. On October 12, 1984, on October 11, 1985, and on October 10, 1986, additional findings of warranted but precluded were made with respect to the listing of *E. r. var. chisoensis*. The 1984 and 1985 findings were published, respectively, in the **Federal Register** issues of May 10, 1985 (50 FR 19761-19763), and January 9, 1986 (51 FR 996-999). Still another finding is due by October 9, 1987, and that finding, to the effect that the

petitioned action is warranted, is incorporated in this proposed rule.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal Lists. A species may be determined to be endangered or threatened due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Echinocereus reichenbachii* var. *chisoensis* (W.T. Marshall) L. Benson (Chisos Mountain hedgehog cactus) are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range

Former overgrazing may have contributed to a decline in grass cover, altering the possible habitat for *E. r. var. chisoensis*. Some authorities (Heil and Anderson 1982, Heil *et al.* 1985) think that reduction in grass cover may have removed the species' preferred seedling establishment habitat. Without grazing, natural grass re-establishment may create a more favorable environment for seedlings. However, recovery of overgrazed desert rangeland is a slow process and some desert communities never return to their former composition.

Plants occur within 100 feet (33 meters) of a major road and also near a popular park visitation spot. These plants and their habitat are vulnerable to destruction from road maintenance and repair or from trail building by the National Park Service or contractors.

B. Overutilization for commercial, recreational, scientific, or educational purposes

Commercial collectors find *E. r. var. chisoensis* desirable because of its rarity, both in the field and in the trade; private individuals may find it desirable for its attractive flowers. Plants are vulnerable to taking because many occur near a major road where they are readily accessible and where they are highly visible during the flowering season. Because of the low number of individual plants, any taking would be detrimental to the population.

C. Disease or predation

None known.

D. The inadequacy of existing regulatory mechanisms

National Park Service regulations prohibit taking natural or cultural

resources from a National Park, except by permit. Otherwise, the Park Service has no special requirements for protection or management of *E. r. var. chisoensis*. All cacti are included on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Species on Appendix II require a permit from the originating country before being shipped internationally. CITES only applies to international trade and does not regulate commerce either between or within States. *E. r. var. chisoensis* is not currently protected by either Federal or State law.

E. Other natural or manmade factors affecting its continued existence

Scarcity (approximately 1,000 individuals) and limited distribution make this plant vulnerable to both natural and human-caused threats. Any further reduction in numbers could reduce the reproductive capabilities and genetic potential of the plant.

Long or short term climatic changes may be creating drier conditions in the area, possibly contributing to a population decline. Evans (pers. comm. 1986) notes that the spring of 1986 was very dry. As a result, few *E. r. var. chisoensis* flowered or fruited and many looked dessicated. Zimmerman (pers. comm. 1986) suggests that a long term shift toward drier conditions has created a less than adequate reproductive situation for this species.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list *E. r. var. chisoensis* as threatened. Although this plant has a small population size and limited distribution, threatened, rather than endangered, status seems appropriate because extinction does not appear imminent, and some protection is already provided by the National Park Service. The reasons for not designating critical habitat are discussed below.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that, to the maximum extent prudent and determinable, the Secretary designate any habitat of a species that is considered to be critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for *E. r. var. chisoensis* at this time. As discussed under Factor "B" in the "Summary of Factors Affecting

the Species," this plant is threatened by taking. Publication of critical habitat descriptions and maps would make the plant even more vulnerable. The National Park Service has been notified of the locations of the plant and the importance of protection. Habitat protection will be addressed through the recovery process and through Section 7 of the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation of the Act are codified at 50 CFR Part 402. Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service. The usual result of a section 7 consultation, if jeopardy is found, is modification and not cancellation of a proposed action. Road improvements or trail construction by the National Park Service or contractors may damage or remove some plants and habitat of *E. r. var. chisoensis*. If planned construction activities may affect this cactus, the

National Park Service must enter into consultation with the Service prior to initiation of a project. No other Federal activities are known or are expected to affect this species.

The Act and its implementing regulations found at 50 CFR 17.71 and 17.72 set forth a series of general trade prohibitions and exceptions that apply to all threatened plants. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export any threatened plant, transport it in interstate or foreign commerce in the course of a commercial activity, sell or offer it for sale in interstate or foreign commerce, or remove it from areas under Federal jurisdiction and reduce it to possession. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that a statement of "cultivated origin" appears on their containers. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving threatened agencies under certain circumstances. With respect to *E. r. var. chisoensis*, it is anticipated that few trade permits would ever be sought or issued since the plant is not common in cultivation or in the wild. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, DC 20240 (703/235-1903).

Echinocereus reichenbachii var. *chisoensis* is on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Species on Appendix II require a permit from the country of origin prior to export. International trade in this plant is minimal. If this species is listed under the Act, the Service will review it to determine whether it should be classified under CITES.

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning any aspect of this proposal are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *E. r. var. chisoensis*;

(2) The location of any additional population of *E. r. var. chisoensis* and the reasons why any habitat should or should not be determined to be critical habitat as provided by Section 4 of the Act;

(3) Additional information concerning the range and distribution of *E. r. var. chisoensis*; and

(4) Current or planned activities in the subject area and their possible impacts on *E. r. var. chisoensis*.

Final promulgation of the regulation on *E. r. var. chisoensis* will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director (see ADDRESSES section).

National Environmental Policy Act

The Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* of October 25, 1983 (48 FR 49244).

References Cited

- Benson, L. 1969. The cacti of the United States and Canada—New names and nomenclature combinations—I. *Cactus and Succulent Journal* (U.S.) 41:124-128.
- Benson, L. 1982. The cacti of the United States and Canada. Stanford University Press, 1044 pp.
- Evans, D.B. 1986. Survey of Chisos pitaya (*Echinocereus reichenbachii* var. *chisoensis*). U.S. National Park Service, Big Bend National Park, Texas, 18 pp.
- Heil, K.D. and E.F. Anderson. 1982. Status report on *Echinocereus chisoensis*. U.S. Fish and Wildlife Service, Office of Endangered Species, Albuquerque, New Mexico, 19 pp.
- Heil K.D., S. Brack, and J.M. Porter. 1985. The rare and sensitive cacti of Big Bend National Park. U.S. National Park Service, Big Bend National Park, Texas 41 pp.
- Marshall, W.T. 1940. *Echinocereus chisoensis* sp. nov. *Cactus and Succulent Journal* (U.S.) 12:15.

Author

The primary author of this proposed rule is Sue Rutman, Endangered Species Office, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972) or FTs 474-3972).

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulation Promulgation**PART 17—[AMENDED]**

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat.

3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical order under the family Cactaceae, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
CACTACEAE—CACTUS FAMILY						
<i>Echinocereus reichenbachii</i> var. <i>chisoensis</i>	Chisos Mountain Hedgehog cactus	U.S.A. (TX)	T		NA	NA
(= <i>Echinocereus chisoensis</i>)						

Dated: June 18, 1987.

Susan Recce,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 87-15185 Filed 7-2-87; 8:45 am]

BILLING CODE 4310-55-M